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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,905	08/25/2003	Horst Noglik	2600.2.16	2340
21552	7590	09/23/2004	EXAMINER	
MADSON & METCALF GATEWAY TOWER WEST SUITE 900 15 WEST SOUTH TEMPLE SALT LAKE CITY, UT 84101			LEE, SIN J	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/647,905	NOGLIK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sin J. Lee	1752	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-22 and 24-28 is/are rejected.
- 7) ☒ Claim(s) 11 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11-24-03</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Specification***

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: there is no proper antecedent basis for the claimed subject matter of present claim 24.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear from the reading of present claim 24 that what those wt. percentages are based on. Are they based on the total weight of solid components present in the composition, or are they based on the total weight of every compound (including solvent) present in the composition?

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 15 is rejected under 35 U.S.C. 102(e) as being anticipated by Inoue et al (6,513,433 B2).

Inoue teaches (see abstract) a lithographic printing plate precursor comprising a hydrophilic support having thereon a heat-sensitive layer. Inoue also teaches (col.12, lines 23-49) the use of a water-soluble overcoat layer on the heat-sensitive layer to prevent the surface of the heat-sensitive layer from being contaminated by lipophilic materials. Therefore, Inoue teaches present invention of claim 15.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-9, 12, 14-22, and 25-28 are rejected under 35 U.S.C. 103(a) as being obvious over Goodin et al (6,503,691 B1) in view of Inoue et al (6,513,433 B2).

The applied reference (goodin'691) has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed

but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Goodin teaches (see Example 1, claim 1, col.1, lines 8-17) a lithographic printing plate precursor comprising an aluminum substrate having coated thereon a layer (which becomes less hydrophilic upon exposure to radiation that effects crosslinking in the layer) that comprises a thermosensitive mixture of polyacrylic acid (present crosslinkable polymer), copper sulfadiazine (present thermally active crosslinking metal salt), and an infrared absorbing dye 830A. Goodin does not disclose present overcoat eluable in aqueous media.

Inoue teaches (see col.12, lines 22-52, col.16, lines 8-11) the use of a water-soluble overcoat layer (which is made of water soluble organic polymer and which preferably comprises a water soluble cyanine dye (present aqueous-soluble infrared-

absorbing dye of claims 12 and 13) provided on a heat-sensitive layer of lithographic printing plate precursor in order to prevent the surface of the heat-sensitive layer from being contaminated by lipophilic materials. Inoue also teaches that this water-soluble overcoat layer is designed to be easily removed at the time of printing. It would have been obvious to one of ordinary skill in the art to provide a water-soluble overcoat layer (which is made of water soluble organic polymer and which preferably comprises a water soluble cyanine dye) on the thermosensitive layer of Goodin's lithographic printing plate precursor in order to prevent the surface of the heat-sensitive layer from being contaminated by lipophilic materials as taught by Inoue. Therefore, Goodin in view of Inoue would render obvious present inventions of claims 1, 4-9, 12, 14-16, 18-22.

With respect to present claims 2 and 3, Goodin states (col.5, lines 28-30) that the crosskicking reactions of the crosslinkable polymer appear to be interdependent with the crosslinking of the metal compound. Also, claim 10 of Goodin states that the crosslinking reactions of the crosslinkable polymer are independent of the crosslinking of the metal salt. Therefore, Goodin in view of Inoue would render obvious present inventions of claims 2 and 3.

With respect to present claim 17, Goodin teaches (col.7, lines 19-67, col.8, lines 1-5) that the thermoset component or crosslinking polymeric component of his invention may comprise any polymeric that is a crosslinked polymer after it is coated onto a substrate, and as representative examples of thermoset polymer, Goodin includes thermoset phenolic resins, thermoset polyimide resins, thermoset epoxides or epoxy resins, thermoset polyester resins, thermoset polyurethanes, thermoset urea resins,

thermoset melamine resins, furan resins, and vinyl ester resins including epoxy (meth)acrylates. Therefore, Goodin in view of Inoue would render obvious present inventions of claim 17.

With respect to present claims 25-28, Goodin imagewise-exposes his lithographic printing plate precursor of Example 1 using a power of 10 Watts and an energy of 550 mJ/cm<sup>2</sup> on a Creo Products Inc. Trendsetter laser plate setting machine (an infrared semiconductor laser). Inoue also teaches that the water-soluble overcoat layer is easily removed at the time of *printing*. Therefore, Goodin in view of Inoue would render obvious present inventions of claims 25-28.

8. Claims 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodin et al (6,503,691 B1) in view of Inoue et al (6,513,433 B2) as applied to claim 1 above, and further in view of Bi et al (5,997,993).

Although Goodin in view of Inoue teaches an overcoat layer comprising water-soluble organic polymer and an water-soluble IR absorbing dye, Goodin in view of Inoue does not disclose present saccharide compound of claim 10. Bi teaches (col.5, lines 12-25) the use of saccharides in an overcoat layer (for a lithographic printing plate precursor) for the on-press removability of the overcoat layer. Based on Bi's teaching, it would have been obvious to one of ordinary skill in the art to provide an overcoat layer in Goodin's invention which comprises an water-soluble organic polymer and an water-soluble IR absorbing dye as well as saccharide compound to ensure on-press removability of the overcoat layer as taught by Bi. Therefore, Goodin in view of Inoue and further in view of Bi would render obvious present inventions of claims 10 and 13.

### ***Double Patenting***

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claim 1, 2, 4-9, 12, 14, and 15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3-5, 10 of U.S. Patent No. 6,503,691 in view of Inoue et al (6,513,433 B2).

Claim 1 of Pat.'691 states the following;

1. A printing plate precursor comprising a substrate having coated thereon a dried layer that becomes less hydrophilic upon exposure to radiation that effects crosslinking in the layer, the layer comprising a mixture of a crosslinkable

polymer and a crosslinkable metal salt wherein the metal salt is selected from the class consisting of metal salts of sulfamide, sulfanylamide, acetosulfamine, sulfathiazole, sulfadiazine, sulfamerazine, sulfamethoxazole, sulfamethazine, sulfaisoxazole, homosulfamine, sulfisomidine, sulfaguanidine, sulfamethizole, sulfapyridine, phthalisosulfathiazole and succinylsulfathiazole and the substrate comprises aluminum.

Therefore, claim 1 of Pat.'691 teaches present invention of claim 1 (including present *thermally active* crosslinking metal salt of claim 8) except for the present overcoat. Inoue teaches (see col.12, lines 22-52, col.16, lines 8-11) the use of a water-soluble overcoat layer (which is made of water soluble organic polymer and which



preferably comprises a water soluble cyanine dye (present aqueous-soluble infrared-absorbing dye of claims 12 and 13) provided on a heat-sensitive layer of lithographic printing plate precursor in order to prevent the surface of the heat-sensitive layer from being contaminated by lipophilic materials. Inoue also teaches that this water-soluble overcoat layer is designed to be easily removed at the time of printing. It would have been obvious to one of ordinary skill in the art to provide a water-soluble overcoat layer (which is made of water soluble organic polymer and which preferably comprises a water soluble cyanine dye) on the thermosensitive layer of the printing plate precursor of claim 1 of Pat.'691 in order to prevent the surface of the heat-sensitive layer from being contaminated by lipophilic materials as taught by Inoue. Therefore, Pat.'691 in view of Inoue would render obvious present inventions of claims 1, 8, 9, 12, 14, and 15.

Claim 10 of Pat.'691 teaches that the crosslinking reactions of the crosslinkable polymer are independent of the crosslinking of the metal salt. Therefore, Pat.'691 in view of Inoue would render obvious present invention of claim 2.

Claims 3 and 5 of Pat.'691 in view of Inoue would render obvious present inventions of claims 4 and 5. Claim 4 of Pat.'691 in view of Inoue would render obvious present inventions of claims 6 and 7.

11. Claims 10 and 13 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3-5, 10 of U.S. Patent No. 6,503,691 in view of Inoue et al (6,513,433 B2) and further in view of Bi et al (5,997,993).

Although Pat.'691 in view of Inoue teaches an overcoat layer comprising water-soluble organic polymer and an water-soluble IR absorbing dye, Pat.'691 in view of Inoue does not disclose present saccharide compound of claim 10. Bi teaches (col.5, lines 12-25) the use of saccharides in an overcoat layer (for a lithographic printing plate precursor) for the on-press removability of the overcoat layer. Based on Bi's teaching, it would have been obvious to one of ordinary skill in the art to provide an overcoat layer in the invention of Pat.'691 which comprises an water-soluble organic polymer and an water-soluble IR absorbing dye as well as saccharide compound to ensure on-press removability of the overcoat layer as taught by Bi. Therefore, Pat.'691 in view of Inoue and further in view of Bi would render obvious present inventions of claims 10 and 13.

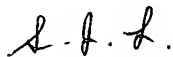
***Allowable Subject Matter***

12. Claims 11 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the cited prior arts (either alone or in combination) teaches or suggests an overcoat layer that comprises chitosan as presently required in claim 11. Also, None of the cited prior arts (either alone or in combination) teaches or suggests present silver 20mercapto-5-amino-1,2,4-thiadiazole of claim 23.

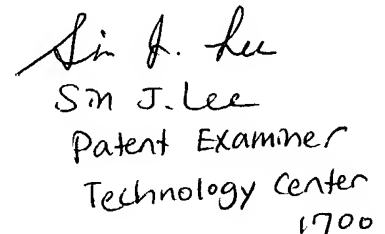
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is 571-272-1333. The examiner can normally be reached on Monday-Friday from 9:00 am EST to 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly, can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



S. Lee  
September 20, 2004



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